## **CLAIMS**:

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	1	1. An audio signal mixing apparatus comprising:
	2	a first plurality of fixed gain amplifiers, each of said first plurality of
	3	fixed gain blocks having an output; and
	4	a second plurality of input nodes, each of said second plurality of input
	5	nodes being associated with a respective input audio signal,
	6	wherein each of said second plurality of inputs nodes being associated
	7	with a respective input audio signal requiring a specified amount of gain are
	8	coupled together and applied to a corresponding at least one of said first
	9	plurality of gain amplifiers, and
11 11	0	wherein each of said outputs of said first plurality of gain amplifiers are
	l 1	coupled together.
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	1	2. An audio signal mixing apparatus comprising:
	2	a first plurality of input nodes, each of said input nodes being
	3	associated with an input audio signal;
	4	a first plurality of switches;
	5	a first plurality of gain amplifiers, each of said first plurality of gain
	6	amplifiers having an input and an output, each of said outputs being coupled
	7	together; and
	8	a first plurality of summing nodes, each of said first plurality of
	9	summing nodes being coupled to a respective one of said inputs of said first
	10	plurality of gain amplifiers;
	1 1	wherein for each of said first plurality of summing nodes, each of said
	1 2	first plurality of input nodes is coupled to said each of said summing nodes
	1 3	through an associated one of said first plurality of switches.

- 1 3. The audio signal mixing apparatus of claim 2 wherein each of said first
- 2 plurality of gain amplifiers is a fixed gain amplifier.
- 1 4. The audio signal mixing apparatus of claim 3 wherein each of said first
- 2 plurality of summing nodes is an op amp summing node.
- 1 5. A method of mixing audio signals from a plurality of sources, said
- 2 method comprising the steps of:
  - summing together at least two of said audio signals that require a
- 4 predetermined gain applied;
  - applying the gain using a circuit comprising at least one of a plurality of
  - fixed gain amplifiers to produce a weighted signal; and
  - summing the weighted signal with other signals produced by similar
  - circuits having different gains.